

**Amendment to the Claims:**

This listing of claims will replace all prior versions and listings of claims in this application:

**Listing of Claims**

1. (Currently Amended) A method for separating a krypton-xenon concentrate ~~purified with respect to hydrocarbons, comprising the steps of:~~
  - separating a ~~[[the]]~~ krypton-xenon-concentrate flow in a preliminary rectifying column to produce a krypton-fraction flow and a xenon-fraction flow;
  - rectifying the xenon-fraction flow in a ~~[[n]] additional~~ xenon rectifying column to produce a purified xenon-fraction flow and a high-boiling-temperature-admixtures flow;
  - producing a purified xenon-fraction flow from an upper zone of the ~~additional~~ xenon rectifying column;
  - separating the purified xenon-fraction flow in a production-xenon column to produce a production-xenon flow and a xenon-column blowing gases flow;
  - rectifying the krypton-fraction flow in ~~[[a]]~~ a additional krypton rectifying column to produce a purified krypton-fraction flow and an intermediate admixtures flow;
  - separating the purified krypton-fraction flow in a production-krypton column to produce a production-krypton flow and a krypton-column blowing gases flow;
  - rectifying the krypton-column blowing gases flow in a krypton recovery rectifying column to produce a recovered krypton flow and a low-boiling-temperature-admixtures flow; and
  - directing the xenon-column blowing gases flow and the recovered krypton flow into the preliminary rectifying column for separation,
  - wherein the preliminary rectifying column~~[[s]], the xenon rectifying column, the krypton rectifying column, and the krypton recovery rectifying column~~ are put into operation with krypton supplied to a respective~~the rectifying~~

~~columns~~<sup>2</sup> contacting space in each said rectifying column, and wherein ~~said~~ [[the]] rectifying columns comprise evaporating condensers.

2. (Currently Amended) The method of Claim 1, wherein reflux formation in the evaporating condensers of ~~[[the]]~~ said rectifying columns occurs under conditions precluding its formation of a solid phase.

3. (Currently Amended) A device for separating a krypton-xenon concentrate ~~purified with respect to hydrocarbons~~, comprising:

a preliminary rectifying column comprising a contact section and a concentration section with an anticipatory assay nipple, the preliminary rectifying column being fed in by a krypton-xenon concentrate line and fed out by a xenon-fraction line and a krypton-fraction line;

a xenon rectifying column in communication with the preliminary rectifying column, comprising a xenon concentration unit and a concentration section with an anticipatory assay nipple, an upper zone of the xenon concentration unit being coupled to a purified xenon-fraction-outlet branch pipe, the purified xenon-fraction-outlet branch pipe being coupled to the purified xenon-fraction line of the production-xenon column, the xenon rectifying column being fed in by the xenon-fraction line and fed out by a purified xenon-fraction line and a high-boiling-temperature-admixtures line;

a krypton rectifying column in communication with the preliminary rectifying column comprising a concentration section with an anticipatory assay nipple, the krypton rectifying column being fed in by the krypton-fraction line and fed out by a purified krypton-fraction line and an intermediate admixtures line;

a production-xenon column in communication with the xenon rectifying column, comprising an evaporating condenser, a thermal converter, and a concentration section with an anticipatory assay nipple, the production-xenon column being fed in by ~~[[a]]~~ the purified xenon-fraction line and fed out by a

xenon-column blowing gases line, wherein the thermal converter is mounted more than the distance between  $0.4H$  and  $0.8H$  above ~~[[the]]~~a feed point of the purified xenon-fraction line, wherein  $H$  is ~~a~~[[the]] height of the concentration section;

a production-krypton column in communication with the krypton rectifying column, comprising an evaporating condenser, a thermal converter, and a concentration section with an anticipatory assay nipple, the production-krypton column being fed in by ~~[[a]]~~the purified krypton-fraction line and fed out by a krypton-column blowing gases line, the thermal converter being mounted more than the distance between  $0.4H$  and  $0.8H$  above ~~[[the]]~~a feed point of the purified krypton-fraction line, wherein  $H$  is ~~[[the]]~~a height of the concentration section;

~~an additional xenon column comprising a xenon concentration unit and a concentration section with an anticipatory assay nipple, an upper zone of the xenon concentration unit being coupled to a purified xenon fraction outlet branch pipe, the purified xenon fraction outlet branch pipe being coupled to the purified xenon fraction line, the additional xenon column being fed in by the xenon fraction line and fed out by the purified xenon fraction line and a high-boiling-temperature admixtures line;~~

~~—— an additional krypton column comprising a concentration section with an anticipatory assay nipple, the additional krypton column being fed in by the krypton fraction line and fed out by the purified krypton fraction line and an intermediate admixtures line;~~

a krypton recovery column in communication with the production-krypton column comprising a concentration section with an anticipatory assay nipple, the krypton recovery column being fed in by the krypton-column blowing gases line and fed out by a recovered krypton line and a low-boiling-temperature-admixtures line;

a purge collection unit, the purge collection unit being coupled to the xenon-column blowing gases line, the high-boiling-temperature-admixtures line, the intermediate admixtures line, the low-boiling-temperature-admixtures line and the recovered krypton line~~[[,]]~~;and

pressure increasing units, wherein the xenon-column blowing gases line, the high-boiling-temperature-admixtures line, the intermediate admixtures line, the low-boiling-temperature-admixtures line and the recovered krypton line are ~~[[~~ coupled, via the pressure increasing units, to ~~a~~~~[[the]]~~ contact section of the preliminary rectifying column.

4. (Currently Amended) The device of Claim 3, wherein each column comprises an evaporating condenser, the evaporating condenser comprising a closed space filled with a working medium, the closed space separating the boiling surface of a coolant and ~~a~~~~[[the]]~~ condensing surface of reflux vapors;~~[[,]]~~

wherein the closed spaces of the evaporating condensers of the preliminary rectifying column, the production-~~[[ ]]~~ krypton column, the production-~~[[ ]]~~ xenon column, the ~~additional~~-krypton rectifying column, and the ~~additional~~-xenon rectifying column ~~being are~~ partially filled with packing;~~[[,]]~~

wherein the working medium for these columns ~~being is~~ a mixture of oxygen and krypton;~~[[,]]~~ ~~[[and]]~~

wherein in the closed space of the evaporating condenser of ~~the~~~~[[a]]~~ krypton recovery column the working medium ~~being is~~ nitrogen;~~[[,]]~~ and

wherein the preliminary rectifying column is coupled with a krypton source via a pipe.